Proposed Class:

Subclass:

NOTE:

"All applicants are requested to include a preliminary classification an newly filed patent applications. The preliminary classification, preferably class and subclass designations, should be identified in the upper right-hand comer of the letter of transmittal accompanying the application papers, for example 'Proposed Class 2, subclass 129-' "MPEP § 601, 7th ed.

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Mail Stop Patent Application Commissioner for Patents P. O. Box 1450 Alexandria, VA 22313-1450

#### **NEW APPLICATION TRANSMITTAL**

Transmitted herewith for filing is the patent application of

Inventor(s):

JOSEPH STEPHEN WILLIAMSON

SCOTT L. GRANGER ROGER D. CHANCEY

**WARNING:** 

37 C.F.R. § 1.41(a)(1) points out:

"(a) A patent is applied for in the name or names of the actual inventor or inventors

"(1) The inventorship of a nonprovisional application is that inventorship set forth in the oath or declaration as prescribed by  $\S$  1.63, except as provided for in  $\S$  1.53(d)(4) and  $\S$  1.63(d). If an oath or declaration as prescribed by  $\S$  1.63 is not filed during the pendency of a nonprovisional application, the inventorship is that inventorship set forth in the application papers filed pursuant to  $\S$  1.53(b), unless a petition under this paragraph accompanied by the fee set forth in  $\S$  1. 17C) is filed supplying or changing the name or names of the inventor or inventors."

For (title):

DRILL STEM CONNECTION

EXPRESS MAILING UNDER 37 C.F.R. § 1.10\*
(Express Mail label number is mandatory.)
(Express Mail certification is optional.)

I hereby certify that this New Application Transmittal and the documents referred to as enclosed therein are being deposited with the United States Postal Service on this date in an envelope as "Express Mail Post Office to Addressee" Mailing Label Number EV 326177710 US, addressed to: Mail Stop Patent Application, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

NUCO

Signature

**Dottie Holloway** 

(type or print name of person certifying)

WARNING: \*WARNING: Certificate of mailing (first class) or facsimile transmission procedures of 37 C.F.R. 1.8 cannot be used to

obtain a date of mailing or transmission for this correspondence.

Each paper or fee filed by "Express Mail" must have the number of the "Express Mail" mailing label

placed thereon prior to mailing- 37 C.F.R. 1.10(b).

"Since the filing of correspondence under § 1.10 without the Express Mail mailing label thereon is an oversight that can be avoided by the exercise of reasonable care, requests for waiver of this requirement will not be granted on petition." Notice of Oct. 24, 1996, 60 Fed. Reg. 56,439, at 56,442.

# 1. Type of Application

This new application is for a(n)

|                      | (check one applicable item below)  |
|----------------------|--|
| · 🗹                  | Original (non provisional)   |
|                      | Design   |
|                      | Plant  |
| VARNING:<br>VARNING: | Do not use this transmittal for a completion in the U.S. of an International Application under 35 U.S.C. § 371(c)(4), unless the International Application is being fled as a divisional, continuation or continuation-in-part application.  Do not use this transmittal for the fling of a provisional application. |
| OTE:                 | If one of the following 3 items apply, then complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF A PRIOR U.S. APPLICATION CLAIMED and a NOTIFICATION IN PARENT APPLICATION OF THE FILING OF THIS CONTINUATION APPLICATION.   |
|                      | Divisional.  |
|                      | Continuation.  |
|                      | Continuation-in-part (C-I-P-)  |

## 2. Benefit of Prior U.S. Application(s) (35 U.S.C. §§ 119(e), 120, or 121)

NOTE: "A nonprovisional application or international application designating the United States of America may claim an invention disclosed in one or more prior-filed co-pending nonprovisional applications or international applications designating the United States of America. In order for an application to claim the benefit of a prior-filed co-pending nonprovisional application or international application designating the United States of America, each prior-filed application must name as an inventor at least one inventor named in the later-filed application and disclose the named inventor's invention claimed in at least one claim of the later-filed application in the manner provided by the first paragraph of 35 U.S.C. 112. In addition, each prior-filed application must be:

- (i) An international application entitled to a filing date in accordance with PCT Article 11 and designating the United States of America; or
- (ii) Complete as set forth in § 1.51(b), or
- (iii) Entitled to a filing date as set forth in § 1.53(b) or § 1.53(d) and include the basic filing fee set forth in § 1.16; or
- (iv) Entitled to a filing date as set forth in § 1.53(b) and have paid therein the processing and retention fee set forth in § 1.21(l) within the time period set forth in § 1.53(f).

#### 37 C.F.R. § 1.78(a)(1).

#### **WARNING:**

If an application claims the benefit of the filing date of an earlier filed application under 35 U.S.C. §§ 120, 121 or 365(c), the 20-year term of that application will be based upon the fling date of the earliest U.S. application that the application makes reference to under 35 U.S.C. §§ 120, 121 or 365(c). (35 U.S.C. § 154(a)(2) does not take into account, for the determination of the patent term, any application on which priority is claimed under 35 U.S.C. §§ 119, 365(a) or 365(b)) For a c-i-p application, applicant should review whether any claim in the patent that will issue is supported by an earlier application and, if not, the applicant should consider canceling the reference to the earlier filed application. The term of a patent is not based on a claim-by-claim approach. See Notice of April 14, 1995, 60 Fed. Reg. 20,195, at 20,205.

#### WARNING:

37 C.F.R. § 1-78(a)(2) deals with the time in which the claim for the benefit of an earlier filing date must be made and states:

- "(2)(i) Except for a continued prosecution application filed under § 1.53(d), any nonprovisional application or international application designating the United States of America claiming the benefit of one or more prior-filed copending nonprovisional applications or international applications designating the United States at America must contain or be amended to contain a reference to each such prior-filed application, identifying it by application number (consisting of the series code and serial number) or international application number and international filing date and indicating the relationship of the applications. Cross references to other related applications may be made when appropriate (see § 1.14).
- (ii) This reference must be submitted during the pendency of the later-filed application. If the later-filed application is an application filed under 35 U.S.C. 111(a), this reference must also be submitted within the later of four months from the actual filing date of the later-filed application or sixteen months from the filing date of the prior-filed application. If the later-filed application is a nonprovisional application: which entered the national stage from an international application after compliance with 35 U.S.C. 371, this reference must also be submitted within the later of four months from the date an which the national stage commenced under 35 U.S.C. 371 (b) or (f) in the later-filed international

application or sixteen months from the filing date of the prior-filed application. These time periods are not extendable. Except as provided in paragraph (a)(3) of this section, the failure to timely submit the reference required by 35 U.S.C. 120 and paragraph (a)(2)(i) of this section is considered a waiver of any benefit under 35 U.S. C. 126, 121, or 365(c) to such prior-filed application. The time periods in this paragraph do not apply if the later-filed application is:

(A) An application for a design patent;

(B) An application filed under 35 U.S.C. 111 (a) before November 29, 2000; or

(C) A nonprovisional application which entered the national stage after compliance with 35 U.S.C. 371 from an international application filed under 35 U.S.C. 363 before November 29, 2060.

(iii) If the later-filed application is a nonprovisional application, the reference required by this paragraph must be included in an application data sheet (§ 1.76), or the specification must contain or be amended to contain such reference in the first sentence following the title.

(iv) The request for a continued prosecution application under § 1.53(d) is the specific reference required by 35 U.S.C. 120 to the prior-filed application. The identification of an application by application number under this section is the identification of every application assigned that application number necessary for a specific reference required by 35 U.S.C. 120 to every such application assigned that application number."

NOTE: If the new application being transmitted is a divisional, continuation or a continuation-in-part of a parent case, or where the parent case is an International Application which designated the U.S., or benefit of a prior provisional application is claimed, then check the following item and complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

The new application being transmitted claims the benefit of prior U.S. application(s). Enclosed are ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

### 3. Papers Enclosed

- A. Required for filing date under 37 C.F.R. § 1.53(0) (Regular) or 37 C.F.R. § 1.153 (Design) Application
  - 18 Pages of specification
  - 11 Pages of claims
  - 8 Sheets of drawing

**WARNING:** 

DO NOT submit original drawings. A high quality copy of the drawings should be supplied when filing a patent application. The drawings that are submitted to the Office must be on strong, white, smooth, and non-shiny paper and meet the standards according to § 1.84. If corrections to the drawings are necessary, they should be made to the original drawing and a high-quality copy of the corrected original drawing then submitted to the Office. Only one copy is required or desired. For comments on proposed then-new 37 C.F.R. § 1.84, see Notice of March 9, 1988 (1990 O.G. 57-62).

NOTE: "Identification of drawings. Identifying indicia, if provided, should include the title of the invention, inventor's name and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin."

#### (complete the following, if applicable)

| ┖ | The end | losed of | drawing( | s) a | re pl | hoto | grapl | n( | s) | ). |
|---|---------|----------|----------|------|-------|------|-------|----|----|----|
|---|---------|----------|----------|------|-------|------|-------|----|----|----|

NOTE: 37 C.F.R. 1.84

"(b) Photographs.

"(1) Black and white. Photographs, including photocopies of photographs, are not ordinarily permitted in utility and design patent applications. The Office will accept photographs in utility and design patent applications, however, if photographs are the only practicable medium for illustrating the claimed invention. For example, photographs or photomicrographs of electrophoresis gels, blots (e.g., immunological, western, Southern, and northern), auto radiographs, cell cultures (stained and unstained), histological tissue cross sections (stained and unstained), animals, plants, in vivo imaging, thin layer chromatography plates, crystalline structures, and, in a design patent application, ornamental effects, are acceptable. If the subject matter of the application admits of illustration by a drawing, the examiner may require a drawing in place of the photograph. The photographs must be of sufficient quality so that all details in the photographs are reproducible in the printed patent.

"(2) Color photographs. Color photographs will be accepted in utility and design patent applications if the conditions for accepting color drawings and black and white photographs have been satisfied. See paragraphs (a)(2) and (b)(1) of this section."

|    |   | ne enclosed drawing(s) are in color. Three (3) sets of color drawings and a ETITION TO ACCEPT COLOR DRAWINGS)" are attached. 37 C.F.R. §§ 84(a)(2) and 1.84(b).  |  |  |  |  |  |
|----|---|--|--|--|--|--|--|
|    | disclose t<br>invention<br>black and<br>an applic<br>utility or | C.F.R. 1.84(a)  "(2 Color. On rare occasions, color drawings may be necessary as the only practical medium by which to se subject matter sought to be patented in a utility or design patent application or the subject matter of a statutory registration. The color drawings must be of sufficient quality such that all details in the drawings are reproducible in white in the printed patent. Color drawings are not permitted in international applications (see PCT Rule 11.13), or in ution, or copy thereof, submitted under the Office electronic filing system. The Office will accept color drawings in lesign patent applications and statutory invention registrations only after granting a petition filed under this paragraph why the color drawings are necessary. Any such petition must include the following:  (i) The fee set forth in § 1.17(h);  (ii) Three (3) sets of color drawings; |  |  |  |  |  |
|    | The pater   | <ul> <li>(iii) A black and white photocopy that accurately depicts, to the extent possible, the subject matter shown in the color drawing; and</li> <li>(iv) An amendment to the specification to insert (unless the specification contains or has been previously amended to contain) the following language as the first paragraph of the brief description of the drawings: t or application file contains at least one drawing executed in color. Copies of this patent or patent application with color drawing(s) will be provided by the Office upon request and payment of the necessary fee."</li> </ul>  |  |  |  |  |  |
|    |   | formal   |  |  |  |  |  |
|    | $\overline{\checkmark}$   | informal   |  |  |  |  |  |
|    | В.  | Other Papers Enclosed  |  |  |  |  |  |
|    |   | 2 Pages of declaration and power of attorney Pages of abstract   |  |  |  |  |  |
|    |   | Other  |  |  |  |  |  |
| 4. |   | onal papers enclosed   |  |  |  |  |  |
|    | . 🔲   | Amendment to claims  |  |  |  |  |  |
|    |   | Cancel in this application claims before calculating the filing fee.  (At least one original dependent claim must be retained for filing purposes.)  |  |  |  |  |  |
|    |   | Add the claims shown on the attached amendment. (Claims have been numbered consecutively following the highest numbered original claims.)  |  |  |  |  |  |
|    | · 🗀   | Preliminary amendment  |  |  |  |  |  |
|    | $\square$   | Information Disclosure Statement (37 C.F.R. §1.98)   |  |  |  |  |  |
|    | NOTE<br>within an<br>under § 1                                  | 37 C.F.R. § -1.97 (b) An information disclosure statement shall be considered by the office if filed by the applicant one of the following time periods:  (1) Within three months of the filing date of a national application other than a continued prosecution application 53(4);  (2) Within three months of the date of entry of the national stage as set forth in § 1.491 in an international   |  |  |  |  |  |
|    | application   |  |  |  |  |  |  |
|    | *   |  |  |  |  |  |  |
|    | WARNII<br>parent ap<br>continuin                                | G: In order to ensure consideration of information previously submitted but which has not been considered in the plication, an applicant must resubmit the information, complying with 37 C.F.R. § 7.97 and 37 C.F.R. § 1.98, in the gapplication filed under 37 C.F.R. § 1.53(b). See § 609B(3). M.P.E.P., 7th Edition, Rev. I  |  |  |  |  |  |
|    |   | Form PTO-1449 (PTO/SB/08A and 08B)<br>Citations  |  |  |  |  |  |
|    |   | Declaration of Biological Deposit  |  |  |  |  |  |
|    |   | Submission of "Sequence Listing," computer readable copy and/or  |  |  |  |  |  |
|    | _ <del>_</del>  | amendment pertaining thereto for biotechnology invention containing nucleotide and/or amino acid sequence.   |  |  |  |  |  |

| L  |                             |                               |                      | Attorney(s)                             | to      | Accept                                   | and                   | Follow                | Instructions  | from     |
|--|-----------------------------|-------------------------------|----------------------|---|---------|--|-----------------------|-----------------------|---|----------|
|  | -                           | entative                      |                      |   |         |  |                       |                       |   |          |
| . 📙  | -                           | l Comm                        | ents                 |   |         |  |                       |                       |   |          |
| Ц.   | Other                       |                               |                      |   |         |  |                       | •                     |   |          |
| Declaration or oath (including power of attorney)  NOTE: A newly executed declaration is not required in a continuation or divisional application provided that the prior nonprovisional application contained a declaration as required, the application being filed is by all or fewer than all the inventors named in the prior application, there is no new matter in the application being filed, and a copy of the executed declaration filed in the prior application {showing the signature or an indication thereon that it was signed} is submitted. The copy must be accompanied by a statement requesting deletion of the names of person(s) who are not inventors of the application being filed if the declaration in the prior application was filed under § 1.47, then a copy of that declaration must be filed accompanied by a copy of the decision granting § 1.47 status or, if a nonsigning person under § 1.47 has subsequently joined in a prior application, then a copy of the subsequently executed declaration must be filed. See 37 C.F.R. §§ 1.63(d)(1)—(3).  NOTE A declaration filed to complete an application must be executed, identify the specification to which it is directed, identify each inventor by full name including family name and at least one given name, without abbreviation together with any other given name or initial, and the residence, post office address and country or citizenship of each inventor, and state whether the inventor is a sole or joint inventor. 37 C.F.R. § 7-63(a)(7)-(4).  NOTE: "The in inventorship of a nonprovisional application is that in inventorship set forth in the oath or declaration as prescribed by § 1.62, except as provided for in § 1.53(d)(4) and § 1.63(d). If an oath or declaration as prescribed by § -1.63 is not filed during the pendency of a nonprovisional application, the in inventorship is the inventor or inventors." 37 C.F.R. § 1.41 (a)(1). |                             |                               |                      |   |         |  |                       |                       |   |          |
|  | (12)(1).                    |                               |                      |   |         |  |                       |                       |   |          |
| $\checkmark$   | Enclos                      | sed                           |                      |   |         |  |                       | •                     |   |          |
|  | Execut                      | ted by                        |                      |   |         |  |                       |                       |   |          |
|  |                             |                               | (0                   | check <mark>all</mark> app              | olica   | ble boxes                                | ·)                    |                       |   |          |
|  |                             | invento                       | r(s).                |   |         |  |                       |                       |   |          |
|  |                             | legal re                      | prese                | entative of in                          | nven    | tor(s). 37                               | C.F.I                 | R. §§ 1.4             | 2 or 1.43.  |          |
|  |                             | joint in                      | vent                 | or or perso                             | n sh    | owing a                                  | propi                 | rietary in            | iterest on beh  | alf of   |
|  |                             | invento                       | r wh                 | o refused to                            | sign    | or canno                                 | t be r                | eached.               |   |          |
|  |                             |                               |                      |   |         |  |                       |                       | and the state   |          |
|  |                             | require                       | d by                 | 37 C.F.R.                               | § 1.4   | 7 is also                                | attac                 | hed. See              | item 13 belo  | w for    |
|  |                             | fee:                          |                      |   |         |  |                       |                       |   |          |
|  | Not Er                      | iclosed.                      |                      |   |         |  |                       |                       |   |          |
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|  |                             |                               |                      | is made by                              |         |  |                       |                       | 37 C.F.R. § 1   | .41(c)   |
| (The d   | eclarati                    |                               |                      |   |         |  | •                     | ,                     | C.F.R. § 1.16(  | e) can   |
|  |                             | quently):                     |                      | ong with th                             | o sul   | charge 10                                | quiic                 | u Uy J/ (             | J.I.IX. 9 1.10(                                       | c) can   |
| 00 1110  |                             |                               |                      | at the filing i                         |         | thorized:                                |                       |                       |   |          |
|  | _                           |                               | _                    | d unless call                           |         |  | on 3'                 | CER                   | 8 1.41(4))  |          |
|  |                             | (HOT TOO                      | <sub>1</sub> um c    | u unicss can                            | .cu II  | no questi                                | OII. J                | / C.F.R.              | § 1.41(d))  |          |
| Invent   | orship S                    | Statemen                      | ıt                   |   |         |  |                       |                       |   |          |
| WARNING of the var   |                             | If the name<br>at the time to | ed inver<br>he last  | ntors are each not<br>claimed invention | the inv | ventors of all<br>nade, should b         | the clain<br>e submii | ns an explana<br>ted: | tion, including the o                                 | wnership |
| The in   | ventorsl                    | hip for a                     | ll the               | claims in th                            | nis aj  | pplication                               | are:                  |                       |   |          |
| ☑ The same   |                             |                               |                      |   |         |  |                       |                       |   |          |
| -  | 1110 54                     |                               |                      |   | 0       | r  |                       |                       |   |          |
|  |                             |                               |                      |   | •       | -  |                       |                       |   |          |

6.

5.

|    |  |   | last claimed in  | on, including th  |  | of the various clai  | ms                              |
|----|--|---|--|---|--|--|---------------------------------|
| 7. | Langu  | age   |  |   |  |  |                                 |
|    | NOTE:<br>translatio<br>required  | An application incluence of the non-English to be filed with the applications.  | language application   | and the processing fe   | e of \$130.00 requir   | ther than English. An Engled by 37 C.F.R. § 1:17(1<br>§ 1:52(d):   | glish<br>k) is                  |
|    |  | English Non-English  ☐ The att  | ached translati  | ion is a verified   | translation. 3'  | 7 CFR 1.52(d).   |                                 |
| 8. | Assign   | nment   |  |   |  |  |                                 |
|    | <b>I</b>   | is attached.  | A separate  C) ACCOMPA   | ANYING NEW  | SHEET FO   | OR ASSIGNME<br>APPLICATION"  |                                 |
|    |  | will follow.  |  |   |  |  |                                 |
|    | NOTE:<br>the assign  | "it an assignment is a<br>nment." Notice of May   |  |   | eparate letters-one fo   | or the application and one   | e for                           |
|    | WARNIN<br>applicati  | G: A newly e.<br>on is filed by an assigne  | xecuted "CERTIFICA<br>e: Notice of April 30,   | TE UNDER 37 C.F.R. §<br>1993, 1150 O.G. 62-64   | § 3.73(b)" must be file  | ed when a continuation-in-   | -part                           |
| 9. | Certif   | ied Copy  |  |   |  |  |                                 |
|    | Certif   | ied copy(ies) of  | application(s)   |   |  |  |                                 |
|    | count  | У   |  | appl. no.   |  | filed  |                                 |
|    | from v<br>□<br>□   | which priority is<br>is (are) attache<br>will follow.   |  |   |  |  |                                 |
|    | (1)(i) In application date of the priority is application month, a application (A) A des | on, and within the later<br>we prior foreign applica<br>is claimed, as well as a<br>on for which priority is<br>nd year of its filing. Th | filed under 35 U.S.C. of four months from iton. This time period iny foreign applicatio claimed, by specifyin e time periods in this                   | 117(a), the claim for pi<br>the actual filing date<br>is not extendable. The c<br>on for the same subject<br>g the application numb   | of the application or<br>claim must identify the<br>matter and having a<br>er, country (or intelle                             | sted during the pendency of<br>sixteen months from the f<br>e foreign application for w<br>a filing date before that of<br>sectual property authority),<br>under 35 U.S.C. 111 (a) i | iling<br>hich<br>f the<br>dav.  |
|    | 119(0)-(d<br>waived. I<br>of this se<br>number,<br>petition to<br>(1) The c              | l) or 365(a) not present<br>f a claim for priority un<br>ection, the claim may b<br>country (or intellectual<br>o accept a delayed clain  | ted within the time pe<br>der 35 U.S.C. 119(0)<br>the accepted if the clo<br>property authority),<br>n for priority under 3.<br>19(a)-(d) or 365(a) an | eriod provided by parag<br>-(d) or 365(0) is present<br>im identifying the prio<br>and the day, month, as<br>5 U.S.C. 119(a)-(d) or 3 | graph (a) of this secti<br>ted after the time per<br>or foreign application<br>ad year of its filing v<br>(65(a) must be accom | m for priority under 35 U. ion is considered to have to iod provided by paragraph to by specifying its applica was unintentionally delaye spanied by: to, unless previously submit   | been<br>h (a)<br>ation<br>ed. A |
|    | NOTE:  |   |  |   |  |  |                                 |

(3) A statement that the entire delay between the date the claim was due under paragraph (a)(1) of this section and the date the claim was filed was unintentional. The Commissioner may require additional information where there is a question whether the delay was unintentional."

#### 37 C. F R. § 1.63 Oath or declaration.

"(a) An oath or declaration filed under § 1.51(b)(2) as a part of a nonprovisional application must:

- (c) Unless such information is supplied on an application data sheet in accordance with § 7.75, the oath or declaration must also identify:
  - (2) Any foreign application for patent (or inventor's certificate) for which a claim for priority is made pursuant to § 1.55, and any foreign application having a filing date before that of the application on which priority is claimed, by specifying the application number, country, day, month, and year of its filing."

The foreign application forming the basis for the claim for priority must be referred to in the oath or declaration. 37 C.F.R. § 1.55(a) and 1.63.

NOTE: This item is for any foreign priority for which the application being filed directly relates. If any parent U.S. application or In international Application from which this application claims benefit under 35 U.S.C. § 120 is itself entitled to priority from a prior foreign application, then complete item 18 on the ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

# 10. Fee Calculation (37 CFR 1.16)

#### 

|                                     | Number Filed | Number Extra |      | Rate     | Basic Fee     |
|-------------------------------------|--------------|--------------|------|----------|---------------|
|                                     |              |              |      |          | \$770.00      |
| Total Claims                        | 37           | 17           | х    | 18/9     | \$306.00      |
| Independent Claims                  | 5            | 2            | х    | 86/43    | \$172.00      |
| Multiple Dependent Claim(s), if any |              |              | +    | 290/145  | \$0           |
|                                     |              | TOTA         | L FI | LING FEE | : \$ 1,248.00 |

| ole                             | Dependent                                     |  |  | +                        | 290/1                     | 45                   |                      | \$0                            |
|---------------------------------|---|--|--|--------------------------|---------------------------|----------------------|----------------------|--------------------------------|
| (s), if an                      | y   |  |  |                          |                           |                      |                      |                                |
|                                 |   |  | TOTA   | L FIL                    | ING I                     | FEE:                 | \$                   | 1,248.00                       |
|                                 | Amendment                                     |  | laims enclosed.<br>dependencies en                   |                          | l.                        |                      |                      |                                |
| NOTE:<br>expiration<br>1.16(d). | If the fees far extra<br>of the time period s | claims are not paid on fi<br>set for response by the P | ling they must be paid or<br>atent and Trademark Off | the claims<br>ice in any | s cancelled<br>v notice o | d by am<br>f fee dej | endment<br>Siciency. | t, prior to the<br>37 C.F.R. § |
|                                 |   |  | Filing Fee Calcu                                     | lation                   |                           | \$                   | 1,24                 | 8.00                           |
| B.                              | □ Desig                                       | n application  |  |                          |                           |                      |                      |                                |
|                                 | (\$340.00 or \$                               | S170.0037 CFR  | 1.16(f))   |                          |                           |                      |                      |                                |
|                                 |   |  | Filing Fee Calcu                                     | lation                   |                           | \$                   |                      |                                |
| C.                              | □ Plant                                       | Application  |  |                          |                           |                      |                      |                                |
|                                 | (\$530.00 or \$                               | S265.0037 CFR  | 1.16(g))   |                          |                           |                      |                      |                                |
|                                 |   |  | Filing Fee Calcul                                    | lation                   |                           | \$                   |                      |                                |

# 11. Assertion of Small Entity Status

|   | Applicant her   | eby asse  | erts status as a small entity under 37 C.F.R. § 1.27  |
|---|---|---|---|
| should mad<br>the definite<br>paying smo              | t as a small entity of t. "(c) Assertion ke a determination, pu ions set forth in para all entity fees, actuall               | he basic filir<br>of small en<br>ursuant to po<br>graph (a) o<br>y make an o<br>the applica | e assertion of small entity status, whether by a written specific declaration thereof or ing fee or the fee for the entry into the national phase and states: natity status. Any party (person, small business concern or nonprofit organization) aragraph (f) of this section, of entitlement to be accorded small entity status based on f this section, and must, in order to establish small entity status for the purpose of assertion of entitlement to small entity status, in the manner set forth in paragraphs tion or patent in which such small entity fees are to be paid.  by writing. Small entity status may be established by a written assertion of |
| entitlemen  | to small entity status  |   |   |
| words or v  | is a small entity, or to<br>wording are required<br>omply with the assertic   | (ii)<br>(iii)<br>hat small en<br>to assert sn   | Be signed (see paragraph (c)(2) of this section), and<br>Convey the concept of entitlement to small entity status, such as by stating that<br>tity status is entitled to be asserted for the application or patent. While no specific<br>nall entity status, the intent to assert small entity status must be clearly indicated in  |
| oruer to co   | (2)   | Parties wh  | o can sign and file the written assertion. The written assertion can be signed by;  |
| the Office)   | , § 3.73(b) of this cha   |   | One of the parties identified in § 1.33(b) (e.g., an attorney or agent registered with standing, who can also file the written assertion;   |
|   |   | as not been   | At least one of the individuals identified as an inventor (even though a $\S$ 1.63 submitted), notwithstanding $\S$ 1.33(b)(4), who can also file the written assertion   |
| pursuant to   | the exception under   |   | this part; or  An assignee of an undivided part interest, notwithstanding §§ 1.33(b)(3) and 3.73(b)   |
|   | (3)   | ssignee cann<br>Assertion i   | not file the assertion without resort to a party identified under § $1.33(b)$ of this part. by payment of the small entity basic filing or basic national fee. The payment, by any $ll$ entity basic filing fees set forth in §§ $1.76(a)$ , (f) (g), (h), or (k), or one of the small  |
| entity basi   | c national fees set fo  | orth in §§ 1.   | 482(a)(1), (a)(2), (a)(3), (a)(4), or (a)(5), will be treated as a written assertion of type of basic filing or basic national fee is inadvertently selected in error. if the Office accords small entity status based on payment of a small entity basic   |
| filing or b<br>small entit<br>1.16 (l).               | asic national fee und<br>y fee that is applicabl  | le to that app  | h (c)(3) of this section that is not applicable to that application, any balance of the olication will be due along with the appropriate surcharge set forth in § 1.16(e), or §   |
|   |   |   | The payment of any small entity fee other than those set forth in paragraph (c)(3) of it or not) will not be treated as a written assertion of entitlement to small entity status entity status in an application or a patent."   |
| must be sp<br>and desire<br>regardless<br>divisional, | ecifically established<br>d. Status as a small of<br>of the relationship or<br>or continuation-in-po<br>plication, requires a | by an assert<br>entity in one<br>of the appli<br>art applicati                              | tion required in related, continuing, and reissue applications. Status as a small entity tion in each related, continuing and reissue application in which status is appropriate application or patent does not affect the status of any other application or patent, cations or patents. The refiling of an application under § 1.53 as a continuation, on (including a continued prosecution application under § 1.53(d)), or the filing of a to continued entitlement to small entity status for the continuing or reissue   |
| WARNIN<br>unequivoc                                   |   |   | not be established when the person or persons signing the statement can cation." M.P.E.P. § 509.03 (emphasis added).  |
| (comple   | te the following, i   | if applicat   | ole)  |
|   |   |   | y was asserted in the prior application filed   |
|   | on  | , fr  | om which benefit is being claimed for this application  |
|   | under: 35 U.S.C. §  |   | . 110(a)  |
|   | 33 O.S.C. 9   | Н   | 119(e)<br>120   |
|   |   |   | 121   |
|   |   |   | 365(c)  |
| and wh  | ich status as a   | small er  | ntity is still proper and asserted for this application.  |
|   | A convert the   | written   | assertion of small entity filed in the prior application is   |
|   | included.   | , willich   | absortion of small entity fried in the prior application is   |

NOTE: A refund based on establishment of small entity status, of a portion of fees timely paid in full prior to establishing status as a small entity may only be obtained if an assertion under § 7.27(c) and a request for a refund of the excess amount are filed within three months of the date of the timely payment of the full fee. The three-month time period is not extendable under § 7.136. 37 C.F.R. § 1.28(a).

|     |  | Filing Fee Calculation (50%) of A, B, or   | · C above) \$                   |  |  |  |  |
|-----|--|--|---------------------------------|--|--|--|--|
| 12. | Reques   | st for International-Type Search (37 CFR 1.104(c   | 1))                             |  |  |  |  |
|     |  | (complete, if applicable)  |                                 |  |  |  |  |
|     |  | Please prepare an international-type search rep<br>time when national examination on the merits ta   |                                 |  |  |  |  |
| 13. | Fee Pa   | yment Being Made at This Time  |                                 |  |  |  |  |
| o   | <ul> <li>□ Not Enclosed</li> <li>□ No filing fee is to be paid at this time.</li> <li>(This and the surcharge required by 37 CFR 1.16(e) can be paid subsequently.)</li> <li>☑ Enclosed</li> </ul>                                     |  |                                 |  |  |  |  |
|     |  | Basic filing fee Recording Assignment  | \$ <u>1,248.00</u>              |  |  |  |  |
|     |  | (\$40.00; 37 CFR 1.21(h)) Petition fee for filing by other than all the inventors or person on behalf of the inventor where inventor refused to sign or cannot be reached. | \$40.00                         |  |  |  |  |
|     |  | (\$130.00; 37 CFR 1.47 and 1.17(h)) For processing an application with a specification in a non-English language.  | \$                              |  |  |  |  |
|     |  | (\$130.00; 37 CFR 1.52(d) and 1.17(k))<br>Processing and retention fee.  | \$                              |  |  |  |  |
|     |  | (\$130.00; 37 CFR 1.53(d) and 1.21(l))   | \$                              |  |  |  |  |
|     |  | Fee for international-type search report (\$40.00; 37 CFR 1.21(e))   | \$                              |  |  |  |  |
|     |  | Total fees enclosed  | \$ <u>1,288.00</u>              |  |  |  |  |
| 14. | Metho  | d of Payment of Fees   |                                 |  |  |  |  |
|     | Attached is a Check in the amount of \$1,288.00.  Authorization is hereby made to charge the amount of \$ to  To Deposit Account 50-0897  To Credit card as shown on the attached credit card information authorization form PTO-2038. |  |                                 |  |  |  |  |
|     | WARNING  | G: Credit card information should not be included on this form as it may   | become public.                  |  |  |  |  |
|     |  | Charge any additional fees required by this paper the manner authorized above.   | er or credit any overpayment in |  |  |  |  |

A duplicate of this paper is attached.

### 15. Authorization to Charge Additional Fees

WARNING: If no fees are to be paid on filing, the following items should not be completed.

WARNING: Accurately count claims, especially multiple dependent claims, to avoid unexpected high charges, if extra claim charges are authorized.

WARNING: Even though small entity status is accorded where the wrong type of small entity basic filing fee or basic national fee is selected but the exact amount of the fee is paid, applicant still needs to pay the correct small entity amount for the basic filing or basic national fee where selection of the wrong type of fee results in a deficiency. While an accompanying general authorization to charge any additional fees suffices to pay the balance due of the proper small entity basic filing or basic national fee, specific authorizations to charge fees under § 1.17 or extension of time fees do not suffice to pay any balance due of the proper small entity basic filing or basic national fee because they do not actually authorize payment of small entity amounts. Changes To Implement the Patent Business Goals; Final Rule [Fed. Reg.: September 8, 2000, pages 54603-54683, at 54611; OG: October 3, 2000, pages 14-391.

- The Office is hereby authorized to charge, in the manner shown above, the following additional fees that may be required by this paper and during the entire pendency of this application.
  - ☑ 37 C.F.R. § 1.16(a), (f) or (g) (filing fees)
  - ☑ 37 C.F.R. § 1.16(b), (c) and (d) (presentation of extra claims)

NOTE: Because additional fees for excess or multiple dependent claims not paid on filing or on later presentation must only be paid or these claims cancelled by amendment prier to the expiration of the time period set for response by the PTO in any notice of fee deficiency (37 C.F.R. § 1.16(d)), it might be best not to authorize the PTO to charge additional claim fees, except possibly when dealing with amendments after final action.

□ 37 C.F.R. § 1.16(e) (surcharge far filing the basic filing fee and/or declaration on a date later than the filing date of the application)
 □ 37 C.F.R. § 1.17(a)(1)--(5) (extension fees pursuant to § 1.136(a)).
 □ 37 C.F.R. § 1.17 (application processing fees)

NOTE: A written request may be submitted in an application that is an authorization to treat any concurrent or future reply, requiring a petition for an extension of time under this paragraph for its timely submission, as incorporating a petition for extension of time for the appropriate length of time. An authorization to charge ail required fees, fees under § 1.17, or all required extension of time fees will be treated as a constructive petition far an extension of time in any concurrent or future reply requiring a petition for an extension of time in any concurrent reply requiring a petition for an extension of time in any concurrent reply requiring a petition for an extension of time in any concurrent reply requiring a petition for an extension of time under this paragraph for its timely submission." 37 C.F.R. § 1,136(a)(3).

37 C.F.R. § 1.18 (issue fee at or before mailing of Notice of Allowance, pursuant to 37 C.F.R. § 1.311(b))

NOTE: Section 1.311 (b) provides that an authorization to charge the issue fee (§ 1\_18) to a deposit account may be filed in an individual application only after the mailing of the notice of allowance. Accordingly, general authorizations to pay fees and specific authorizations to pay the issue fee that are filed prior to the mailing of a notice of allowance will generally not be treated as requesting payment of the issue fee and will not be given effect to act as a reply to the notice of allowance. Applicant, when paying the issue fee, should submit a new authorization to charge fees, such as by completing box 6b an the current PTOI\_858 form. Where no reply to the notice of allowance is received, the application will stand abandoned notwithstanding the presence of general authorizations to pay fees or a specific authorization to pay the issue fee that were submitted prior to mailing of the notice of allowance. Where an attempt is made to pay the issue fee but an incorrect amount is submitted, § 1.31 1(b)(1) or where the Office's issue fee transmittal form (currently PTOL-85(B)) is completed by applicant and submitted, § 1.311(b)(2), in reply to a notice of allowance, an exception will be made. Such submissions will operate as a request to charge the issue fee to any deposit account identified in a previously filed (i.e., submitted prior to the mailing of the notice of allowance) authorization to charge fees, and will be allowed to act as payment of the correct issue fee. § 1.311(b). See also the change to § 1.26(b). Notice of September 8, 2000, Fed. Reg, 54603-54683, at 54646 and 54647.

NOTE 37 C.F.R. § 1.28(b) requires "Notification of any change in status resulting in loss of entitlement to small entity status must be filed in the application . . . prior to paying, or at the time of paying, . . . the issue fee. . . " From the wording of 37 C.F.R. § 1.28(b), (a) notification of change of status must be made even if the fee is paid as "other than a small entity" and (b) no notification is required if the change is to another small entity,

|                                      | NOTE: nor will to credit to d  | " Amounts of twenty-five dollars or less will not be to the payer be notified of such amounts; amounts over two a deposit account." 37 C.F.R. § 1. 26(a).  Credit Account No. 50-0897  Refund | returned unless specifically requested within a reasonable time,<br>enty-five dollars may be returned by check or, if requested, by |  |  |  |
|--------------------------------------|--|---|---|--|--|--|
| Date:_                               | Mar  | ch 1,2004   | Gary L. Bush<br>Reg. No.: 27,423  |  |  |  |
| 600 Tr<br>Housto<br>Tel. N<br>Fax. N | on, Texa<br>o.: (713<br>Io.: (713  | th LLP<br>uite 4200<br>as 77002<br>b) 220-4726<br>3) 238-7340<br>23,444   |   |  |  |  |
|                                      | Incorporation by reference of added pages (check the following item if the application in this transmittal claims the benefi prior U.S. application(s) (including an international application entering the U.S. st as a continuation, divisional or C-1-P application) and complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENE OF PRIOR U.S. APPLICATION(S) CLAIMED) |   |   |  |  |  |
|                                      |  | Plus Added Pages for New Application(s) Claimed   | ation Transmittal Where Benefit of Prior  Number of pages added   |  |  |  |
|                                      |  | Plus Added Pages for Papers Referred to in Item 4 Above Number of page added  Number of pages added 30  |   |  |  |  |
|                                      |  |   | f inventors) named in prior application(s) of the subject matter claimed in this  Number of pages added                             |  |  |  |
|                                      | <b>V</b>   | Plus "Assignment Cover Letter Acco  | ompanying New Application"  |  |  |  |
|                                      |  |   | Number of pages added6  |  |  |  |
|                                      | Stater   | nent Where No Further Pages Adde  | ed  |  |  |  |
|                                      |  | further pages form a part of this Tran<br>and check the following item)<br>This transmittal ends with this page.  | smittal, then end this Transmittal with this  |  |  |  |

16.

Instructions as to Overpayment